AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing Of Claims:

1-13. (Canceled).

14. (Currently Amended) A simulation system for a computer-implemented simulation and verification of a control system under development, comprising:

an arrangement for performing a plurality of simulation processes with corresponding memory modules and interface modules, wherein the memory modules include distinct memory locations for inter-module communication, and the system modules are dynamically reconfigured with each other.

15. (Currently Amended) ~~A~~ The simulation system according to claim 14, wherein a simulation is performed by running a control system simulation model, the simulation model including a number of sub-models being performed on one of the plurality of system modules, respectively.

16. (Currently Amended) ~~A~~ The simulation system according to claim 14, wherein at least some of the system modules are dynamically reconfigurable for communication via distinct memory locations.

17. (Currently Amended) ~~A~~ The simulation system according to claim 16, further comprising: a cross-bar switch for dynamic configuration of the distinct memory locations.

18. (Currently Amended) ~~A~~ The simulation system according to claim 17, wherein the cross-bar switch comprises an interconnection scheme for coordination of the distinct memory locations.

19. (Currently Amended) ~~A~~ The simulation system according to claim 14, further comprising: a host-target communication interface for connection of the simulation system with a simulation host, an input interface, and an output interface.

20. (Currently Amended) ~~A~~ The simulation system according to claim 14, wherein the modules include at least one output port server for communication interconnection with respective output port service of other modules.

21. (Currently Amended) A ~~computer-implemented~~ method for simulating and verifying a control system under development by ~~means of~~ a computer simulation system, comprising:

performing a plurality of simulation processes with corresponding memory modules and interface modules, wherein inter-module communication is performed by copying signal values from one module memory location to another distinct module memory location; and

communicating between modules by a cross-bar switch for dynamic reconfiguration of the distinct memory locations.

22. (Canceled).

23. (Currently Amended) ~~A~~ The method according to claim ~~22~~21, wherein dynamic reconfiguration of the distinct memory locations is achieved according to an interconnection scheme.

24. (Currently Amended) ~~A~~ The method according to claim 21, wherein inter-module communication is achieved via output port service of the various modules.

25. (Currently Amended) A computer readable medium having a computer program ~~provided with program code for carrying out a,~~ which is executable by a computer, ~~implemented method~~ for simulating and verifying a control system under development by ~~means of~~ a simulation system, comprising:

program code for performing a plurality of simulation processes with corresponding memory modules and interface modules, wherein inter-module communication is performed by copying signal values from one module memory location to another distinct module memory location~~according to any one of the claims 8 to 11~~, when the computer program is run on a computer to enable dynamic interconnection of the system modules.

26. (Canceled).